## REMARKS

Claims 11-14 and 16-17 are currently pending in the present application, wherein claims 1-10 and 15 have been canceled, claims 16 and 17 have been amended to even more clearly define the present invention, and claims 10-14 have been amended to depend from claim 17. Entry of the above amendment and favorable reconsideration is respectfully requested.

In paragraph 8 of the final Office action ("Action'), the Examiner rejects claims 9-17 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically, the Examiner asserts that the apparatus of claims 9-15 and 17 are directed to software and therefore are not statutory and the method of claim 16 is not falling within one of the four statutory categories of invention. Claims 9, 10, and 15 have been canceled, rendering this rejection moot with regard thereto. Regarding claims 11-14, 16, and 17, this rejection is respectfully traversed.

Claims 11-14 and 17 are directed to a color management apparatus. The apparatus includes, *inter alia*, a separator for separating image format data into supplied image data and color characteristic data, wherein the color characteristic data includes a lookup table composed of only characteristic points and an identifier for identifying a table development method; table development means for developing said lookup table into a multidimensional lookup table; and image data converting means which uses the multidimensional lookup table developed by said table development means to convert supplied image data into output image data. In rejecting claims 11-14 and 17, the Examiner asserts that "[s]ince the 'table development' and 'image data converting' means can possibly be read as software...this 'apparatus' claim can be read as directed entirely to software, rather than an actual physical apparatus." To support his assertion the Examiner points to the fact that the means are illustrated in the figures in block diagram form as opposed to illustrating specific structure. Applicants respectfully disagree.

First, although the Examiner is correct in noting that the figures illustrate the various means in block diagram form, the figures further distinguish those instances where the means are software. For example, Figures 8 and 9 illustrate "S/W FOR TABLE DEVELOPMENT" see reference numerals 21 and 22 respectively, whereas figure 12 illustrates "TABLE DEVELOPMENT MEANS". Furthermore, the specification discloses that the color management apparatus (i.e., circuitry) may be utilized in various known machines such as a

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digital camera, printer, scanner, and the like. Furthermore, one skilled in the art would readily appreciate that the claimed apparatus cannot be achieved merely with software (i.e., some form of circuitry/processor is required). Accordingly, the apparatus defined by claims 11-14 or 17 is statutory.

Independent claim 16 defines a color correction method for converting a supplied image signal into an output image signal. The method includes, *inter alia*, separating color characteristic data from the supplied image data; performing a table development process such that said lookup table composed of the characteristic points is developed into a multidimensional lookup table; and converting the supplied image data into output image data using said multidimensional lookup table.

In rejecting the method of claim 16, the Examiner asserts the claimed process is not statutory because it "neither transforms underlying subject matter nor positively ties to another statutory category that accomplishes the claimed method steps." Applicants respectfully disagree.

As discussed above, claim 16 recites a method of converting input image data into output image data that includes a number of steps. The claimed steps result in a transformation of the supplied image data into an output image data. The supplied image data and the output data represent a physical image or article that can be reproduced. Therefore, the method as recited in claim 16, transforms the "underlying subject matter (such as an article or material) to a different state or thing" (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. § 101). Accordingly, the conversion method of claim 16 is directed to statutory subject matter.

For at least those reasons presented above, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 11-14, 16, and 17 under 35 U.S.C. § 101.

In paragraph 15 of the Action, the Examiner rejects claims 9-14 and 17 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. More specifically, the Examiner asserts that "there does not appear any structure that ties to the 'means' in these

claims." Claims 9 and 10 have been canceled, rendering this rejection moot with regard thereto. Regarding claims 11-14 and 17, this rejection is respectfully traversed.

As discussed in section 2181 of the MPEP, the disclosure of the structure corresponding to a means-plus-function limitation may be implicit in the written description if it would have been clear to those skilled in the art what structure must perform the function recited in the means-plus-function limitation. See Atmel Corp. v. Information Storage Devices Inc., 198 F.3d 1374, 1379, 53 USPQ2d 1225, 1228 (Fed. Cir. 1999) (stating that the "one skilled in the art" analysis should apply in determining whether sufficient structure has been disclosed to support a means-plus-function limitation and that the USPTO's recently issued proposed Supplemental Guidelines are consistent with the court's holding on this point); Dossel, 115 F.3d at 946-47, 42 USPQ2d at 1885 ("Clearly, a unit which receives digital data, performs complex mathematical computations and outputs the results to a display must be implemented by or on a general or special purpose computer (although it is not clear why the written description does not simply state 'computer' or some equivalent phrase.)"). In the present case, the claimed invention recites, *inter alia*, table development means and image converting means. One skilled in the art would understand what circuitry is necessary to implement the claimed means in view of the disclosure of the known devices (i.e., digital camera and printer) and the required functionality. Accordingly, Applicants respectfully request the withdrawal of the rejection of claims 11-14 and 17 under 35 U.S.C. § 112, second paragraph.

In paragraph 19 of the Action, the Examiner rejects claims 9-16 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,809,213 to Bhattacharjya ("Bhattacharjya"), in view of U.S. Patent No. 6,504,954 to Goldstein ("Goldstein"). Claims 9, 10, and 15 have been canceled and claims 11-14 have been amended to depend from or include the subject matter of claim 17, thereby rendering this rejection moot with regard thereto. Regarding claim 16, Applicants respectfully traverse this rejection.

In order to support a rejection under 35 U.S.C. § 103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness three criteria must be met. First, there must be some rationale to combine the cited references. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every

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claimed element. In the present case, claim 16 as amended is patentable over the combination of Bhattacharjya and Goldstein for at least the reason that the combination fails to disclose each and every claimed element.

Claim 16 defines a color correction method for converting supplied image data into output image data. The method includes, *inter alia*, separating color characteristic data from the supplied image data, wherein the color characteristic data includes an identifier for identifying a table development method; and a lookup table composed of only characteristic points indicating the relationship between supplied image data and output image data, wherein a characteristic point is a point impossible to be interpolated by the identified table development method.

Bhattacharjya discloses a method and apparatus for automatic color correction in which a nonlinear interpolation technique is applied to a relatively small number of measured sample values generated from color image patches to provide a color lookup table having a larger number of calibration values stored therein. Goldstein discloses a system and method for computing and applying a real-time transformation between digital input and output signal to achieve a specified output histogram. However, nowhere in Bhattacharjya nor Goldstein is there any disclosure or suggestion of a method that includes separating color characteristic data from the supplied image data, wherein the color characteristic data includes an identifier for identifying a table development method; and a lookup table composed of only characteristic points indicating the relationship between supplied image data and output image data, wherein a characteristic point is a point impossible to be interpolated by the identified table development method as claimed.

Since Bhattacharjya and Goldstein both fail to disclose or suggest a method that includes separating color characteristic data from the supplied image data, wherein the color characteristic data includes an identifier for identifying a table development method; and a lookup table composed of only characteristic points indicating the relationship between supplied image data and output image data, wherein a characteristic point is a point impossible to be interpolated by the identified table development method as claimed, the combination of these two references cannot possibly disclose or suggest said element. Therefore, even if one skilled in the art had some rationale to combine Bhattacharjya and Goldstein (which Applicants do not concede), the

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combination would still fail to render claim 16 unpatentable. Reconsideration and withdrawal of the rejection of claim 16 under 35 U.S.C. § 103 is respectfully requested.

In paragraph 27 of the Action, the Examiner rejects claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Bhattacharjya in view of Goldstein, and further in view of the PNG Specification (http://www.w3.org/TR/REC-png-961001). This rejection is respectfully traversed.

Independent claim 17, and claims 11-14 which depend there from, define a color management apparatus for converting supplied image data into output image data using color characteristic data. The apparatus includes, *inter alia*, a separator for separating image format data into the supplied image data and color characteristic data, wherein the color characteristic data includes a lookup table composed of only characteristic points indicating the relationship between supplied image data and output image data, where a characteristic point is a point impossible to be interpolated by a table development method which is to be performed; and an identifier for identifying a table development method; table development means for developing said lookup table into a multidimensional lookup table; and image data converting means which uses the multidimensional lookup table developed by said table development means to convert supplied image data into output image data.

In rejecting claim 17, the Examiner asserts that image formats that include color correction characteristic data and require a separator are known in the art. To support this assertion the Examiner points to the PNG specification. Although PNG may include color correction data with image data in an image signal, thereby requiring a separator as asserted by the Examiner, nowhere in the cited combination is there any disclosure or suggestion of the color correction data including an identifier for identifying a table development method and a lookup table composed of only characteristic points as claimed. Furthermore, nowhere in Bhattacharjya or Goldstein is there any disclosure or suggestion of an identifier and lookup table as claimed.

Since Bhattacharjya, Goldstein, and the PNG specification each fails to disclose or suggestion of the color correction data including an identifier for identifying a table development method and a lookup table composed of only characteristic points as claimed, the combination of these three references cannot possibly disclose or suggest said feature. Therefore, even if one

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skilled in the art had some rationale to combine Bhattacharjya, Goldstein, and the PNG Specification (which Applicants do not concede), the combination would still fail to render claim 17 unpatentable because the combination fails to disclose each and every claimed element. Accordingly, reconsideration and withdrawal of the rejection of claim 17 under 35 U.S.C. § 103 is respectfully requested.

The application is in condition for allowance. Notice of same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Penny Caudle Reg. No. 46,607 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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